Company: San Diego Gas & Electric Company (U902M)
Proceeding: 2016 General Rate Case
Application: A.14-11-003
Exhibit: SDG&E-211

SDG&E

REBUTTAL TESTIMONY OF CARL LAPETER

(ELECTRIC GENERATION)

June 2015

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Doc#297606

TABLE OF CONTENTS

SDG&E REBUTTAL TESTIMONY OF FIRST M. LAST

(SUBJECT MATTER)

I. SUMMARY OF DIFFERENCES

TOTAL O&M - Constant 2013 ($000)			
	Base Year 2013	**Test Year 2016**	**Change**
SDG&E	**42,863**	**54,415**	**11,552**
ORA	**42,863**	**48,098**	**5,235**

TOTAL CAPITAL - Constant 2013 ($000)			
	2014	**2015**	**2016**
SDG&E	**21,736**	**8,408**	**8,347**
ORA	**13,340**	**3,912**	**4,753**

II. INTRODUCTION

A. ORA

Office of Ratepayer Advocates (ORA) issued its report on Electric Generation on April 24, 2015.[1] The following is a summary of ORA's positions:

- ORA proposes a reduction to the Generation Plant-Desert Star forecast based on a recalculation of the Long Term Service Agreement (LTSA), which utilizes the 2014 actual costs as its foundation.
- ORA proposes a reduction to the Non-Shared Resource Planning forecast based on utilizing a 5 year average, instead of the 3 year average utilized by SDG&E.
- ORA proposes a reduction to the Shared Resource Planning – Director forecast based on utilizing a 3 year average that includes 2014.
- ORA proposes reductions to the Generation capital forecast, stating that SDG&E did not provide sufficient justification, and that 2014 actual spend was less than forecasted.

[1] Ex. ORA-8, Loy, Report on the Results of Operations for San Diego Gas & Electric Company Southern California Gas Company Test Year 2016 General Rate Case, SDG&E – Electric Generation and SONGS, April 24, 2015.

III. REBUTTAL TO PARTIES' O&M PROPOSALS

A. Non-Shared Services O&M

NON-SHARED O&M - Constant 2013 ($000)			
	Base Year 2013	**Test Year 2016**	**Change**
SDG&E	**42,161**	**53,471**	**11,310**
ORA	**42,161**	**47,363**	**5,202**

1. Disputed Cost – Desert Star Energy Center

NON-SHARED O&M – GENERATION PLANT-DESERT STAR Constant 2013 ($000)			
	Base Year 2013	**Test Year 2016**	**Change**
SDG&E	**18,706**	**24,641**	**5,935**
ORA	**18,705**	**19,682**	**976**

a. ORA

ORA takes issue with the Test Year O&M forecast for Desert Star Energy Center. ORA states that "a comparison of actual, recorded 2014 data to SDG&E's 2014 forecast belies SDG&E's claim that "Base YR Rec" and "Zero-Based" methods result in the best forecasts or capture the year-to year fluctuations better than ORA's 3-year average."[2]

SDG&E disagrees with ORA's use of the 3 year average for non-labor because as stated in the testimony, 2013 actuals did not include approximately 2 months of operating expenses due to "a GSU transformer failure that required the plant to be out of services for an extended period."[3] The operating costs for that period would have been approximately $2.8M.[4] ORA's use of the 3 year average, including 2013 actuals and without considering the extended outage period, leads to a lower than normal average. SDG&E maintains that using the Base Year recorded with adjustments for the extended outage period provides a more accurate forecast. The Commission should adopt SDG&E's forecast as reasonable.

SDG&E also disagrees with ORA's methodology for calculating the Non Standard Escalation (NSE) for the Long Term Service Agreement (LTSA) expenses at Desert Star. ORA's method used the 2014 actual LTSA expense, multiplied by the percentage increase in the

[2] Ex. ORA-8, p. 7, lines 3-6.
[3] Ex. SDG&E-11, p. CSL-17, lines 17-18.
[4] Ex. SDG&E-11, p. CSL-17, lines 19-20.

forecasted expense from 2014 to 2016. Using 2014 actuals as the foundation for the calculation does not factor in that 2014 was not a typical operating year for Desert Star.

As noted in the testimony, Desert Star was scheduled for a Major Inspection and Annual Maintenance in 2014.[5] In addition, the plant experienced below average dispatch in 2014. These two factors resulted in lower than typical operating hours. This reduction in hours is significant in that the calculation for the LTSA expense is based on actual operational hours for the plant. Below are the actual operational hours and resulting expenses by year for Desert Star.

Desert Star Combustion Turbine Operational Hours By Year (CT1 and CT2)			
2011	**2012**	**2013**	**2014**
13,894	12,730	12,243	7,978

Desert Star LTSA Expense By Year (CT1 and CT2) Constant 2013 ($000)			
2011	**2012**	**2013**	**2014**
11,232	10,182	10,270	7,039

This data clearly indicates that 2014 was not representative of a typical operational year for Desert Star. Therefore, SDG&E disagrees with ORA's method because it includes actual 2014 expenses that are well below the historical average. Further, SDG&E reasserts that the zero based methodology chosen, as explained in my direct testimony[6], is the most reasonable method for forecasting future LTSA expenditures for Desert Star. Accordingly, the Commission should adopt SDG&E's forecast as reasonable.

2. Disputed Cost – Non-Shared Resource Planning

NON-SHARED O&M–RESOURCE PLANNING Constant 2013 ($000)			
	Base Year 2013	**Test Year 2016**	**Change**
SDG&E	**426**	**1,261**	**835**
ORA	**425**	**410**	**(15)**

[5] Ex. SDG&E-11, p. CSL-16, lines 24-25.
[6] Ex. SDG&E-11, p. CSL-16, lines 11-18.

a. ORA

ORA takes issue with the Test Year O&M forecast for non-shared Resource Planning costs within the Generation department. ORA states that it based its recommendation upon the 5 year average that includes recorded costs through 2014.[7]

SDG&E disagrees with ORA as the 2014 recorded costs did not include incremental new costs associated with the Sustainable Communities program and does not account for the SONGS costs. As stated in my direct testimony[8], SDG&E forecasted the labor and non-labor utilizing the 3-year average as it presented tasks and staffing at the current level and which provided the most reasonable foundation for forecasting the future needs of the organization, then layered on the incremental new costs associated with the Sustainable Communities program. Despite SDG&E's expectations when preparing the forecast, the managing effort for the Sustainable Communities program did not transfer to Resource Planning in 2014, and therefore, those costs continued to be incurred by the company, but recorded in Electric Distribution. ORA argues that SDG&E seeks an increase in staffing.[9] In reality, however, SDG&E seeks a reduction in staffing from that approved in D.10-06-016 (from 2 FTEs to 1 FTE), and that this position includes the responsibilities to oversee the O&M obligations of the Sustainable Communities program. Additionally, by using a 5 year average, which only reflects the incremental costs for the SONGS consultant in 2014, ORA's forecast erroneously discounts the costs associated with this activity. Therefore, SDG&E's request for one FTE and the forecast for future costs are reasonable.

B. Shared Services O&M

SHARED O&M - Constant 2013 ($000)			
	Base Year 2013	**Test Year 2016**	**Change**
SDG&E	**702**	**944**	**242**
ORA	**702**	**735**	**33**

[7] Ex. ORA-8, p. 8, lines 16-17.
[8] Ex. SDG&E-11, p. CSL-22, line 2-18.
[9] Ex. ORA-8 p. 7, line 24 – p. 8, line1.

1. Disputed Cost – Shared Resource Planning-Director

a. ORA

ORA takes issue with the Test Year O&M forecast for Resource Planning - Director. ORA states that it used a three year average, which incorporates the 2014 adjusted-recorded data into the forecast methodology.[10]

SDG&E disagrees with ORA for a number of reasons. SDG&E's request includes not only the three year history but also recognizes the increases that are needed for planning for a more complex system. ORA's method simply utilizes the historical spend and disregards the future needs of the organization. SDG&E's request adds additional staff to deal with the growing complexity created by the state's policy, such as the 33% Renewable Portfolio Standard, and Green House Gas Reductions as driven by AB32, to increase renewables and decrease greenhouse gases. With the large increase of renewables, the existing planning methods are no longer adequate. Additionally, the historical method of simply planning to a peak summer day reserve margin is no longer adequate. Changes in resource delivery patterns and the need for ramping resources to integrate renewables is increasing the work load and complexity of the planning process. Thus, SDG&E reasonably anticipates the need to increase staffing, and is currently in the process of doing so. This change is reflected in the SDG&E forecast. The Commission should adopt SDG&E's forecast as reasonable.

IV. REBUTTAL TO PARTIES' CAPITAL PROPOSALS

The following abbreviations are used in this Rebuttal:

CPEP – Cuymaca Peak Energy Plant

DSEC – Desert Star Energy Center

MEF – Miramar Energy Facility

PEC – Palomar Energy Center

WOA – Work Order Authorization

For ease of reference, this rebuttal section to the ORA Capital Expenditures follows the in the same order as the Capital Items addressed in Ex. ORA-8, beginning on page 12 of Ex. ORA-8. Each capital item addressed in Ex. ORA-8 is responded to in this rebuttal.

[10] Ex. ORA-8, p. 10, lines 18-19.

Ex. ORA-8, p. 12 Section IX. Tools and Test Equipment

A. Disputed Capital Cost: Tools and Test Equipment PEC, MEF, DSEC and CPEP (Ex. SDG&E-11, p. CSL-27, lines 20-23, p. CSL-28, lines 1-7)

1. ORA (Ex. ORA-8, p. 12, lines 12-17, p. 13, lines 2-17)

ORA takes issue with the capital forecast Electric Generation Tools and Test Equipment. ORA states that it, "used a five-year average as SDG&E's Authorized Work Orders over-stated, on average, past experience by not capturing the years when no capitalized expenditures are made."

2. SDG&E Response

SDG&E accepts the five-year average for actual expenditures for this forecast.

Ex. ORA-8 p. 13 Section X. MIRAMAR PLANT

B. Disputed Capital Cost: Alternate Power Supply MEF 2015 (Ex. SDG&E-11, p. CSL-29, lines 24-30)

1. ORA (Ex. ORA-8, p. 15, lines 3-5, #1)

ORA takes issue with the capital forecast for the Alternate Power Supply upgrade. ORA states, "SDG&E did not provide any evidence that this project is necessary, produces significant savings, and/or is a priority that must be corrected to reduce risk."

2. SDG&E Response

SDG&E disagrees with ORA and refers to Ex. SDG&E-11 (p. CSL-29, lines 25-30) which states, "This project will provide an alternate supply to each turbine generators essential electrical power system. The system upgrade is arranged in a manner to ensure that, during a blackstart situation, or certain maintenance activities, power is maintained to all site critical battery chargers. In addition this upgrade will maintain power to the Black Start Generator battery charger under various plant electrical configurations." The testimony justification discusses the importance of this upgrade to the reliability of the MEF Blackstart system, which is used to support the restoration of the San Diego Electric Grid after a system or partial blackout. The testimony statement refers directly to improved system reliability.

Referring to the risk reduction in ORA's statement, it should be noted that the Application filing date of this GRC, November 14, 2014, predates the decision in the Risk-

Framework OIR,[11] dated December 4, 2014, such that this GRC is not governed by the revised Rate Case Plan of that decision D.14-12-025. As the Commission's own Safety and Enforcement Division (SED) notes in its Staff Report[12] on this GRC:

> Because this GRC application was submitted prior to the final decision in the Risk OIR, Sempra was not required to follow the framework adopted in the Risk OIR.

Notwithstanding that SDG&E has served risk-related testimony demonstrating its current state and plans for addressing risk management in the future, this GRC is not required to meet the new risk-assessment requirements of the revised Rate Case Plan; therefore risk-reduction values were not prepared for this project. Accordingly, the Commission should adopt this SDG&E project as reasonable.

C. Disputed Capital Cost: Mechanical Improvements MEF 2014 (Ex. SDG&E-11, p. CSL-28, lines 14-23)

1. **ORA** (Ex. ORA-8, p. 15, lines 6-8, #2)

ORA takes issue with the capital forecast for Mechanical Improvements. ORA states, "No Work Order Authorization showing that this routine work is really a capital expenditure as opposed to merely a line item in a rate case."

2. SDG&E Response

SDG&E disagrees with ORA because this project is not merely a line item in the rate case, but is intended to provide funding for many small upgrades that occur during the year as a result of an equipment failure or identified need. My direct testimony states,

> This project will be used to capture multiple small mechanical projects to be completed at Miramar Energy Facility. The projects are of a mechanical, structural, or civil nature and are intended to improve plant performance, or address operational, maintenance, safety or environmental issues. For example: Upgrade the drain tank pump system by relocating the pump and modifying the pump controls and level monitoring instrumentation. This will provide for improved low level monitoring and pumping to ensure the tanks are kept dry minimizing the potential for mixed waste.[13]

---

[11] R.13-11-006/D.14-12-025, Order Instituting Rulemaking to Develop a Risk-Based Decision-Making Framework to Evaluate Safety and Reliability Improvements and Revise the General Rate Case Plan for Energy Utilities, Decision effective December 4, 2014.

[12] Safety and Enforcement Division Risk Assessment Section Staff Report on Southern California Gas Company & San Diego Gas and Electric Company 2016-2018 Consolidated General Rate Case Applications A.14-11-003 and A.14-11-004, March 27, 2015, page 8.

[13] Ex. SDG&E-11, p. CSL-28, lines 15-23.

The intent of this capital project is to provide capital funding for small projects to improve plant performance, or address operational, maintenance, safety or environmental issues. Without the ability to fund small projects, many of these improvements may not occur. In cases where a component fails due to normal wear and tear, a small capital project may provide the additional funds needed to install an upgraded replacement for greater reliability, or to modify the system to reduce wear and tear. Small improvements to a power plant are a good value and provide a method to utilize improved technology. A small improvement may provide additional safety, increased component or system reliability, additional environmental control or better operating performance.

To capture these potential costs SDG&E includes Mechanical, Electrical and Instrument Improvement projects in the capital forecast in each forecast year, 2014, 2015 and 2016, for each of the four power plants. SDG&E recognizes that in a given year for a given project, expenditures will vary because many of these projects are based on equipment wear and tear failures, and equipment and system aging problems. Because of this, there is an element of unpredictability as to how much of the funds are used. However, the intent of these Mechanical, Electrical and Instrument improvement projects is to improve plant performance and reliability, or address operational, maintenance, safety or environmental issues. These projects provide good value for minimum cost. Accordingly, the Commission should adopt the 2015 and TY 2016 projects as reasonable.

D. Disputed Capital Cost: Instrumentation Improvements MEF 2014 (Ex. SDG&E-11, p. CSL-28, lines 25-33)

1. **ORA** (Ex. ORA-8, p. 15, lines 9-11, #3)

ORA takes issue with the capital forecast for Instrumentation Improvements. ORA states, "No Work Order Authorization showing that this routine work is really a capital expenditure as opposed to merely a line item in a rate case."

2. SDG&E Response

SDG&E disagrees with ORA. Please see the SDG&E Response to Section IV.C.2. above. This explanation is also applicable to Mechanical, Electrical and Instrument Improvement project rebuttals at PEC, MEF, DSEC and CPEP. The Commission should adopt this SDG&E project as reasonable for 2015 and TY 2016.

E. Disputed Capital Cost: Turbine Controls Upgrade MEF 2014 (Ex. SDG&E-11, p. CSL-29, lines 1-10)

1. ORA (Ex. ORA-8, p. 15, lines 12-15, #4)

ORA takes issue with the capital forecast for the Turbine Controls Upgrade. ORA states, "ORA used the amount budgeted in Work Order Authorization# 2651055, at $1.83 million (2013 dollars) rather that SDG&E requested amount of $1.923 million (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA. SDG&E estimated $1.923 million (2013 dollars), actual total project spend was $2.5M. Since SDG&E spent more than the actual request, the Commission should recognize the original request at reasonable.

Ex. ORA-8 p. 15 Section XI. PALOMAR PLANT

F. Disputed Capital Cost: Generator Step-Up Bushing Seismic Upgrade PEC 2015 (Ex. SDG&E-11, p. CSL-34, lines 8-11)

1. ORA (Ex. ORA-8, p. 16, lines 17-20, Item 2)

ORA takes issue with the capital forecast for the Generator Step-up Bushing Seismic Upgrade. ORA states, "ORA used the amount budgeted in Work Order Authorization # 2650431, at $520,000 (2013 dollars) rather that SDG&E requested amount of $1.54 million (2013 dollars). This impacts 2015."

2. SDG&E Response

SDG&E disagrees with ORA because the project is scheduled to be completed in 2016. The work is split over two years, 2015 and 2016. Therefore, the Work Order Authorization reflects only the work to be done in 2015; the Work Order Authorization for the remaining work will be issued in 2016. Accordingly the Commission should adopt this SDG&E project as reasonable.

G. Disputed Capital Project: Hot Reheat Drain Pot Condenser Upgrade PEC 2014 (Ex. SDG&E-11, p. CSL-32, lines 20-24)

1. ORA (Ex. ORA-8, p. 16, lines 21-24, Item 3)

ORA takes issue with the capital forecast for the Hot Reheat Drain Pot Condenser upgrade. ORA states, "Work Order Authorization #2650941 states that this project has been delayed but does not state how long. ORA removed $138,000 (2013 dollars) from 2014 to reflect this uncertainty."

2. SDG&E Response

SDG&E disagrees with ORA and offers the clarification that the project is delayed until the 2016 annual maintenance outage, as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal). Accordingly, the Commission should adopt this SDG&E project as reasonable.

H. Disputed Capital Project: Exhaust Flex Seal Upgrade PEC 2014 (Ex. SDG&E-11, p. CSL-33, lines 32-35)

1. ORA (Ex. ORA-8, p. 17, lines 1-3, Item 5)

ORA takes issue with the capital forecast for the Exhaust Flex Seal upgrade. ORA states, "No Work Order Authorization for this project. ORA removed $158,000 (2013 dollars) from 2014 to reflect that this project is not authorized."

2. SDG&E Response

SDG&E disagrees with ORA. The work order Authorization will be issued in 2018. The project was delayed because the vendor, General Electric, did not provide a satisfactory upgrade design in 2014 or 2015. Without a satisfactory design, SDG&E decided to delay the project until such time that the design is available. General Electric has now developed a satisfactory design and will be able to provide this upgrade by 2018. SDG&E plans to complete this upgrade during the PEC 2018 annual maintenance outage, as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal). This new design will reduce the number of repairs to the turbine generator flex seal, and provide easier repair when needed. The Commission should adopt this SDG&E project as reasonable.

I. Disputed Capital Project: Steam Turbine Upgraded N2 Packing PEC 2014 (Ex. SDG&E-11, p. CSL-31, lines 12-15)

1. ORA (Ex. ORA-8, p. 17, lines 4-6, Item 6)

ORA takes issue with the capital forecast for the Steam Turbine Upgraded N2 Packing. ORA states, "Work Order Authorization #2650654 identifies the actual amount to be $204,156. ORA reduced SDG&E's 2014 request by $108,000 to reflect the authorized amount for this project."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

J. Disputed Capital Cost: Drum Level Control Valves Using Linear Variable Displacement Transformer PEC 2014 (Ex. SDG&E-11, p. CSL-31, lines 32-35)

1. ORA (Ex. ORA-8, p. 17, lines 7-9, Item 8)

ORA takes issue with the capital forecast for Drum Level Control Valves Using Linear Variable Displacement Transformer. ORA states, "Accounting records for AWO #2650937 show that $30,577 was actually spent. ORA reduced SDG&E's 2014 request of $51,000 by $20,400."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

K. Disputed Capital Project: Move Air Lines Above Ground PEC 2016 (Ex. SDG&E-11, p. CSL-36, lines 17-21)

1. ORA (Ex. ORA-8, p. 17, lines 10-13, Item 9)

ORA takes issue with the capital forecast for the Move Air Lines Above Ground upgrade. ORA states, "SDG&E did not provide any supporting documentation proving that this project is necessary, results in any cost savings, and/or is linked to a risk assessment showing that this project is a priority. ORA removed $200,000 (2013 dollars) from SDG&E's TY 2016 request."

2. SDG&E Response

SDG&E disagrees with ORA because as shown in Ex. SDG&E-11 (p. CSL-36, lines 18-21), "The underground instrument air piping system will be abandoned in place and replaced with an above ground piping system. This will greatly improve reliability for this critical system by allowing piping to be visibly monitored for leaks and allowing for quick repair." Thus, my direct testimony provides the reasons why this is a reliability improvement. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29 -30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show the project "is linked to a risk assessment showing that this project is a priority."[14] The Commission should adopt this SDG&E project as reasonable.

[14] Ex. ORA-8, p. 17, line 12.

L. Disputed Capital Project: Steam Turbine Condenser Water Box Coating PEC 2014 (Ex. SDG&E-11, p. CSL-31, lines 17-21)

1. ORA (Ex. ORA-8, p. 17, lines 14-16, Item 10)

ORA takes issue with the capital forecast for the Steam Turbine Water Box Coating Upgrade. ORA states, "Accounting records show that this project has been delayed but does not explain how long. ORA removed SDG&E's 2014 request for $100,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA. The project requires a plant outage for the work to be performed. The project was rescheduled due to work interference and coordination issues. The project is currently rescheduled for the 2016 maintenance outage, as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal). The Commission should adopt this SDG&E project as reasonable.

M. Disputed Capital Cost: Relocate Sample Panels to New Water Lab PEC 2014 (Ex. SDG&E-11, p. CSL-32, lines 37-41)

1. ORA (Ex. ORA-8, p. 17, lines17-19, Item 11)

ORA takes issue with the capital forecast for the Relocate Sample Panels to New Water Lab. ORA states, "Accounting records show that this project actually cost $363,000. For this reason, ORA reduced SDG&E's 2014 request of $590,000 by $127,000"

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

N. Disputed Capital Cost: Bypass Quick Change Trim Upgrade PEC 2014 (Ex. SDG&E-11, p. CSL-31, lines 28-30)

1. ORA (Ex. ORA-8, p. 17, lines 20-22, Item 13)

ORA takes issue with the capital forecast for the Bypass Quick Change Trim Upgrade. ORA states, "Accounting records show that this project actually cost $345,500. For this reason, ORA reduced SDG&E's 2014 request of $390,000 by $44,500."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed item.

O. Disputed Capital Project: Revenue Meter Upgrade PEC 2014 (Ex. SDG&E-11, p. CSL-31, lines 23-26)

1. ORA (Ex. ORA-8, p. 17, lines 23-26, Item 17)

ORA takes issue with the capital forecast for the Revenue Meter Upgrade. ORA states, "Work Order Authorization #2650938 indicates that this upgrade is needed to replace the wrong type of connectors. ORA has concluded that this mistake should be paid by shareholders not ratepayers. ORA removed SDG&E 2014 request for $58,000."

2. SDG&E Response

SDG&E disagrees with ORA. There is an apparent misunderstanding of the nature of the upgrade. As stated in Ex. SDG&E-11 (p. CSL-31, lines 24-26), "Installation of upgraded revenue meters that are of a style and brand that supports Ethernet communications, which has been demonstrated to be a more reliable method of data transfer." The upgrade was done to improve the meter communications hardware, not to replace the wrong connector. The original revenue meters used a serial link communication protocol, the standard at the time the Palomar Energy Center was built. The design of the original meter hardware is based on the serial link protocol. Upgrading the protocol to Ethernet requires new design hardware and thus a new meter. The new Ethernet connected meters provide more reliable communications to the California ISO (CAISO) and the plant control systems. Accordingly, the Commission should adopt this SDG&E project as reasonable.

P. Disputed Capital Project: Security Improvements PEC 2014 (Ex. SDG&E-11, p. CSL-34, lines 1-5)

1. ORA (Ex. ORA-8, p. 17, lines 27-29, Item 21)

ORA takes issue with the capital forecast for the Security Improvements. ORA states, "ORA found no evidence that in 2014 this project was authorized and any money was expended. For these reasons, ORA removed SDG&E's 2014 request for $211,000."

2. SDG&E Response

SDG&E disagrees with ORA. This was not performed in 2014 as originally planned; the upgrade is currently planned for 2016, as shown in response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal). Given the electric grid security concerns in the power industry, SDG&E asks the commission to adopt the change to the schedule forecast for this project as reasonable.

Q. Disputed Capital Project: Upgrade Programmable Logic Controllers PEC 2015 (Ex. SDG&E-11, p. CSL-35, lines **13-21)**

1. ORA (Ex. ORA-8, p. 17, lines 30-31, Item 22, cont. on p. 18, lines 1-3)

ORA takes issue with the capital forecast for the Upgrade Programmable Logic Controllers. ORA states, "ORA found no evidence that this project was authorized with a Work Order Authorization. In addition, SDG&E did not justify this project by showing it is necessary, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2015 request for $800,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA. This project is currently in the contract process, and the WOA has been completed. The WOA was not provided to ORA as no charges had been incurred at the time of the request. The nature of this project requires that it is spread over two years for completion. The design and manufacture of the hardware is schedule to begin this year (2015) and the system will be installed and tested during the scheduled 2016 outage. The project purpose is stated in Ex. SDG&E-11 (p. CSL-35, lines 16-21), "…This control system upgrade provides improvements to the following: system security, operator graphical and functional interface, ability to customize the operator interface, ability to make improvements to control functions, data collection and storage, trending and analysis, plant and system troubleshooting, and simplified network architecture." Though not explicitly stated, the testimony implies the new installation provides improved reliability for the plant control system. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29 -30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[15] The Commission should adopt this SDG&E project as reasonable.

R. Disputed Capital Project: Upgrade Chiller MK VIe to Ovation PEC 2015 (Ex. SDG&E-11, p. CSL-35, lines **23-29)**

1. ORA (Ex. ORA-8, p. 18, lines 4-8, Item 23)

ORA takes issue with the capital forecast for the Upgrade Chiller MK VIe to Ovation. ORA states, "ORA found that Ovation supports GE's Mark VIe. For this reason, ORA concluded that this project is not necessary. In addition, SDG&E did not justify this project by providing

[15] Ex. ORA-8, p. 18, line 2.

estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2015 request for $303,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA removing this request. SDG&E agrees with ORA that Ovation supports the GE MK VIe control system; Ovation also supports many other control systems and programmable logic controllers, from numerous manufacturers. Upgrading the GE MK VIe Chiller control system to an Ovation Control system will provide a unified control system architecture throughout the facility that will improve reliability. In addition, unifying the control system network architecture improves the system cyber security functions.

As stated in the project purpose in Ex. SDG&E-11 (p. CSL-35, lines 16-21), "Upgrade the chiller GE MKVIe control system to Ovation controls. This control system upgrade provides improvements to the following: system security, operator graphical and functional interface, ability to customize the operator interface, ability to make improvements to control functions, data collection and storage, trending and analysis, plant and system troubleshooting, and simplified network architecture" Though not explicitly stated, the testimony implies the new installation provides improved reliability for the plant control system. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29 -30, and page 7, lines 3-14, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[16] The Commission should adopt this SDG&E project as reasonable.

S. Disputed Capital Project: Inlet Guide Vane & Gas Control Valve Upgrade PEC 2015 (Ex. SDG&E-11, p. CSL-35, lines **8-11)**

1. ORA (Ex. ORA-8, p.18, lines 9-14, Item 24)

ORA takes issue with the capital forecast for the Inlet Guide Vane & Gas Control Valve Upgrade. ORA states, "ORA could not find a Work Order Authorization for this 2015 project. In addition, SDG&E did not justify this project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2015 request for $553,000 (2013 dollars)."

[16] Ex. ORA-8, p.18, line 7.

2. SDG&E Response

SDG&E disagrees with ORA. The WOA was not provided because it is not available, as the project is rescheduled for 2018, as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal). The WOA will be authorized, usually, in the year the project is scheduled. The justification is in my direct testimony at Ex. SDG&E -11 (p. CSL-35, lines 9-11) which states, "Upgrade the current hydraulic actuators that are used for gas valve and inlet guide cane controls to electric actuators. The electric actuator provides easier isolation for system lockouts." The "system lockouts" discussed in my direct testimony is the method used to safely secure the actuators during maintenance activities on the respective turbine generator systems. During outage work activity coordination for system lockouts on the Inlet Guide Vane & Gas Control Valves is complicated because these systems are supplied by the turbine generator lubrication and hydraulic oil systems. The lubrication and hydraulic systems are at the intersection of many maintenance activities, and so system lockout coordination are complicated and therefore have additional safety risk. This upgrade provides independent hydraulic powered operators thus completely isolating these actuators from the lubrication and hydraulic oil systems. For simplicity direct testimony summarized this benefit explanation as, "The electric actuator provides easier isolation for system lockouts."[17] Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 3-14 of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[18] Therefore, as a safety risk reduction, the Commission should adopt this SDG&E project as reasonable.

T. Disputed Capital Project: Chiller Triple Duty Valve Replacement PEC 2015 (Ex. SDG&E-11, p. CSL-35, lines 1-6)

1. ORA (Ex. ORA-8, p. 18, lines 15-20, Item 25)

ORA takes issue with the capital forecast for the Chiller Triple Duty Valve Replacement. ORA states, "ORA could not find a Work Order Authorization for this 2015 project. In addition, SDG&E did not justify this project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2015 request for $105,000 (2013 dollars)."

[17] EX. SDG&E-11, p. CSL-35, lines 10-11.
[18] Ex. ORA-8, p. 18, line 12-13.

2. SDG&E Response

SDG&E disagrees with ORA. This project was rescheduled for 2018, as shown in response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal), therefore the WOA will be authorized in 2018. My direct testimony at Ex. SDG&E-11 (p. CSL-35, lines 2-6) states, "Replace existing triple duty valve, which is prone to leak-by problems, with two valves, to improve system line-up and isolation capability. One valve that will automatically open and close based on pump configuration, and the other will be used to isolate the pump and system for lockout tag out." System Lockout and isolation uses Lock-Out-Tag-Out (LOTO) procedures to safely isolate the system for maintenance activities. This justification discusses improved isolation and use for system lockout. Having a separate valve for isolation purposes reduces wear and tear to provide better isolation when needed for maintenance. This upgrade improves safety during maintenance activities by improving the isolation functions of the system. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[19] Therefore, due to the improved safety isolation, the Commission should adopt this SDG&E project as reasonable.

U. Disputed Capital Project: Exciter Upgrade to Ovation PEC 2016 (Ex. SDG&E-11, p. CSL-36, lines 23-30)

1. ORA (Ex. ORA-8, p. 17, lines 21-26, Item 26)

ORA takes issue with the capital forecast for the Exciter Upgrade to Ovation. ORA states, "SDG&E did not justify this Distributed Control System project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. In addition, ORA could not locate a Work Order Authorization for this 2016 project. For these reasons, ORA removed SDG&E's TY request for $845,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA's argument to remove this project. This project is scheduled for 2016, so the WOA would usually be issued in 2016. My direct testimony at Ex. SDG&E-11 (p. CSL-36, lines 24-30) states, "Upgrade the exciter controls to Ovation to allow for

[19] Ex. ORA-8, p. 18, line 18.

a consistent control system throughout the plant. This control system upgrade provides improvements to the following: system security, operator graphical and functional interface, ability to customize the operator interface, ability to make improvements to control functions, data collection and storage, trending and analysis, plant and system troubleshooting, and simplified network architecture." As with the other Ovation upgrades, this upgrade offers significant improvements, resulting in improved reliability in plant operation. In addition unifying the control system network architecture improves the system cyber security functions. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[20] Therefore the Commission should adopt this project as reasonable.

V. Disputed Capital Project: Load Commutated Inverter Upgrade to Ovation PEC 2016 (Ex. SDG&E-11, p. CSL-36, lines 32-39)

1. ORA (Ex. ORA-8, p. 18, 27-29, Item 27, p. 19, lines 1-3)

ORA takes issue with the capital forecast for the Load Commutated Inverter Upgrade to Ovation. ORA states, "SDG&E did not justify this project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. In addition, ORA could not locate a Work Order Authorization for this 2016 project. For these reasons, ORA removed SDG&E's TY request for $575,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA's argument to remove this project. This project is scheduled for 2016, so the WOA would usually be issued in 2016. My direct testimony at Ex. SDG&E-11 (p. CSL-36, lines 24-30) states, "Upgrade the LCI controls to Ovation to allow for a consistent control system throughout the plant. This control system upgrade provides improvements to the following: system security, operator graphical and functional interface, ability to customize the operator interface, ability to make improvements to control functions, data collection and storage, trending and analysis, plant and system troubleshooting, simplified network architecture." As with the other Ovation upgrades, this upgrade offers significant improvements, resulting in improved reliability in plant operation. In addition unifying the

[20] Ex. ORA-8, p. 18, lines 23-24.

control system network architecture improves the system cyber security functions. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[21] Therefore the Commission should adopt this project as reasonable.

W. Disputed Capital Project: Replace Ovation Testing and Training with In-House Laboratory PEC 2016 (Ex. SDG&E-11, p. CSL-37, lines 1-5)

1. ORA (Ex. ORA-8, p. 19, lines 4-9, Item 28)

ORA takes issue with the capital forecast for the Replace Ovation Testing and Training with In-House Laboratory. ORA states, "ORA objects to SDG&E replacing Ovation's training and testing with its own in house version. It is unnecessary because Ovation provides support and training. It is unfair because SDG&E is a monopoly franchise with captive customers who cannot avoid such duplicative extravagances. For these reasons, ORA removed SDG&E's TY request for $554,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA's argument to remove this project. SDG&E disagrees with ORA's description that the project is a "duplicative extravagance". My direct testimony at Ex. SDG&E-11(p. CSL-37, lines 2-5) describes the project as follows, "Create an Ovation training and testing lab to provide the maintenance and operations staff with a simulator where they can learn plant startup and shutdown procedures and test alternate procedures, without affecting plant."

ORA correctly states that Ovation provides training. The Ovation training classes provide operators and technicians with the knowledge and skill necessary and important to understand, use, troubleshoot and maintain the software, architecture and hardware that comprises the Ovation system. However, each power plant has its own complex control logic that is particular to and based on the physical components and design of the plant. This complex logic system is contained in complex software configuration files that are installed within the Ovation software; this is specific to each plant.

[21] Ex. ORA-8, p. 18, line 29 – p. 19, line 1.

The project that is described in my direct testimony is intended to act primarily as a plant operations training simulator, and also permit testing of newly developed operating procedures. Simulator training reduces the risks of training operators on the physical power plant. This "Training and Testing Lab" would contain the same plant configuration files with additional files to simulate the actions and responses of the physical plant, simulating the responses and actions of the physical power plant. This simulator concept is used in the power industry, especially in the nuclear plants, and other industries, and is similar in concept to what is used for aircraft flight simulator training. Therefore the Commission should adopt this project as reasonable.

Ex. ORA-8 p. 19 Section XII. DESERT STAR PLANT

X. Disputed Capital Cost: Steam Turbine Blade Replacement
DSEC
DSEC 2014 (Ex. SDG&E-11, p. CSL-37, lines **23-28)**

1. ORA (Ex. ORA-8, p. 20, lines 8-11, Item 3)

ORA takes issue with the capital forecast for the Steam Turbine Blade Replacement upgrade. ORA states, "ORA found accounting records that show SDG&E actually spent $3.67 million on Work Order Authorization #2650936 rather than the $3.94 million it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $270,000."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

Y. Disputed Capital Cost: Vibration Monitoring System Upgrade
DSEC 2014 (Ex. SDG&E-11, p. CSL-37, lines **30-35)**

1. ORA (Ex. ORA-8, p. 20, lines 12-15, Item 4)

ORA takes issue with the capital forecast for Vibration Monitoring System Upgrade. ORA states, "ORA found accounting records that show SDG&E actually spent $413,600 on Work Order Authorization #2651036 rather than the $441,000 it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $28,000."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

Z. Disputed Capital Cost: Ammonia Dilution Blower Upgrade
DSEC 2014 (Ex. SDG&E-11, p. CSL-38, lines **2-7)**

1. ORA (Ex. ORA-8, p. 20, lines 16-19, Item 5)

ORA takes issue with the capital forecast for the Ammonia Dilution Blower Upgrade. ORA states, "ORA found accounting records that show SDG&E actually spent $138,000 on Work Order Authorization #2651035 rather than the $161,000 it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $23,000."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items.

AA. Disputed Capital Cost: Combustion Turbine 2 Inlet Filter Media Upgrade
DSEC PEC 2014 (Ex. SDG&E-11, p. CSL-38, lines **21-25)**

1. ORA (Ex. ORA-8, p. 20, lines 20-23, Item 8)

ORA takes issue with the capital forecast for the Combustion Turbine 2 Inlet Filter Upgrade. ORA states, "ORA found accounting records that show SDG&E actually spent $162,000 on Work Order Authorization #2651034 rather than the $182,000 it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $20,000."

2. SDG&E Response

Considering that this project was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed item.

BB. Disputed Capital Project: Heat Recovery Steam Generator Penetration Seal Upgrades
DSEC 2016 (Ex. SDG&E-11, p. CSL-38, lines **27-31)**

1. ORA (Ex. ORA-8, p. 20, lines 24-27, Item 9)

ORA takes issue with the capital forecast for the Heat Recovery Steam Generator Penetration Seal Upgrades. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2014 project. For this reason, ORA removed $294,000 (2013 dollars) from SDG&E's 2014 request."

2. SDG&E Response

SDG&E disagrees with ORA. This project was rescheduled for 2015, as shown in response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A

to this rebuttal), and completed under the DSEC Mechanical Improvements work order. The Commission should adopt this SDG&E project as reasonable.

CC. Disputed Capital Project: Desuperheater Upgrades DSEC 2014 (Ex. SDG&E-11, p. CSL-38, lines 33-38)

1. ORA (Ex. ORA-8, p. 21, lines 1-4, Item 11)

ORA takes issue with the capital forecast for the Desuperheater Upgrades. ORA states, "SDG&E did not justify this project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2014 request for $161,000 (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with ORA. My direct testimony at Ex. SDG&E-11 (p. CSL-38, lines 34-38) states, "Steam system desuperheaters (High Pressure Exhaust Vent, Steam Jet Air Ejector, Gland Seal, and Condenser Hood Spray) are currently a welded design. These desuperheaters will be upgraded to a bolted flange design that will allow easier removal for required maintenance on this critical equipment." The desuperheaters require periodic removal, inspection and maintenance to ensure proper operation. Without this change, the desuperheater will need to be cut form the supply pipe to perform the inspection, and then welded back to the supply pipe to restore the system to operation. Repeated cutting and welding is an unnecessary expenditure, and, overtime, may result in additional pipe repairs. The result of changing to the bolted flange design will make maintenance easier and less time consuming. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 10-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[22] Therefore, because this upgrade facilitates important maintenance activities, the Commission should adopt this SDG&E project as reasonable.

DD. Disputed Capital Project: Combustion Turbine 2 Air Inlet Personnel Access Improvements DSEC 2014 (Ex. SDG&E-11, p. CSL-39, lines 1-5)

1. ORA (Ex. ORA-8, p. 21, lines 5-8, Item 12)

ORA takes issue with the capital forecast for the Combustion Turbine 2 Air Inlet Personnel Access Improvements. ORA states, "SDG&E did not provide a Work Order

[22] Ex. ORA-8, p. 21, line 3.

Authorization or accounting records for this 2014 project. For this reason, ORA removed $150,000 (2013 dollars) from SDG&E's 2014 request."

2. SDG&E Response

SDG&E disagrees with the removal of the Combustion Turbine 2 Air Inlet Personnel Access project because as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal), this project was rescheduled to 2016.

EE. Disputed Capital Cost: Mechanical Improvements DSEC 2014 (Ex. SDG&E-11, p. CSL-39, lines **7-12)**

1. ORA (Ex. ORA-8, p. 21, lines 9-12, Item 14)

ORA takes issue with the capital forecast for the Mechanical Improvements. ORA states, "ORA found accounting records that show SDG&E actually spent $15,340 on Work Order Authorization #2651030 rather than the $212,000 it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $196,660 and this adjustment carries over to 2015 and TY 2016."

2. SDG&E Response

Considering that this project for 2014 was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

FF. Disputed Capital Cost: Instrument Improvements DSEC 2014 (Ex. SDG&E-11, p. CSL-39, lines **16-23)**

1. ORA (Ex. ORA-8, p. 21, lines 13-16, Item 15)

ORA takes issue with the capital forecast for the Instrument Improvements. ORA states, "ORA found accounting records that show SDG&E actually spent $29,860 on Work Order Authorization #2651028 rather than the $212,000 it is requesting. For this reason, ORA reduced SDG&E's 2014 request by $182,139 and this adjustment carries over to 2015 and TY 2016."

2. SDG&E Response

Considering that this project for 2014 was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

GG. Disputed Capital Cost: Electrical Improvements DSEC 2014 (Ex. SDG&E-11, p. CSL-39, 25-33)

1. ORA (Ex. ORA-8, p. 21, lines 17-20, Item 16)

ORA takes issue with the capital forecast for the Electrical Improvements. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2014 project. For this reason, ORA removed $212,000 (2013 dollars) from SDG&E's request for 2014, 2015 and TY 2016."

2. SDG&E Response

Considering that this project for 2014 was completed below the estimated cost, SDG&E accepts using the actual expenditure amount for the listed items. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

Ex. ORA-8 p. 21 Section XIII. CUYAMACA PEAK PLANT

HH. Disputed Capital Project: New Fuel Flow Metering CPEP 2014 (Ex. SDG&E-11, p. CSL-44, lines **17-21)**

1. ORA (Ex. ORA-8, p. 22, lines 16-18, Item 1)

ORA takes issue with the capital forecast for the New Fuel Flow Metering. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2015 project. For this reason, ORA removed $229,000 (2013 dollars) from SDG&E's request for 2015."

2. SDG&E Response

SDG&E disagrees with ORA. This project was rescheduled for 2016, as shown in the response to ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4 (see Appendix A to this rebuttal), therefore the WOA will be issued and authorized in 2016. The Commission should adopt this SDG&E project as reasonable.

II. Disputed Capital Project: Black Start Generator CPEP 2014 (Ex. SDG&E-11, p. CSL-44, lines **17-21)**

1. ORA (Ex. ORA-8, p. 22, lines 19-22, Item 2)

ORA takes issue with the capital forecast for the Black Start Generator. ORA states, "SDG&E did not justify this project by showing that it is necessary for operation of the facility, providing estimated savings, and/or linking it to a risk assessment demonstrating it is a priority. For these reasons, ORA removed SDG&E's 2014 request for $1.13 million (2013 dollars)."

2. SDG&E Response

SDG&E disagrees with the ORA. Justification was provided in my direct testimony at Ex. SDG&E-11 (p. CSL-42, lines 30-34), which states, "A black start generator is needed at CPEP to provide for power restoration to the grid in the event of a blackout. This engine will provide SDG&E Grid Operations with a cranking path to the Otay Mesa Energy Center to aid in the restoration of power to the Grid." The blackstart function is necessary for electric grid reliability by providing a method to quickly recover the grid in the event of a system or local blackout. Also, this GRC is not governed by the revised Rate Cast Plan, as noted on page 6, lines 29-30, and page 7, lines 1-10, of this rebuttal; therefore it is not necessary to show information "linking it to a risk assessment demonstrating it is a priority."[23] Therefore the Commission should adopt this project as reasonable.

JJ. Disputed Capital Cost: Mechanical Improvements CPEP 2014 (Ex. SDG&E-11, p. CSL-43, lines **1-10)**

1. ORA (Ex. ORA-8, p. 22, lines 23-26, Item 3)

ORA takes issue with the capital forecast for the Mechanical Improvements. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2014 project. For this reason, ORA removed $100,000 (2013 dollars) from SDG&E's request for 2014, 2015 and TY 2016."

2. SDG&E Response

Considering that there were no expenditures for this project in 2014, SDG&E accepts removing the budgeted money for 2014. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

KK. Disputed Capital Cost: Instrumentation Improvements CPEP 2014 (Ex. SDG&E-11, p. CSL-43, lines **12-20)**

1. ORA (Ex. ORA-8, p. 23, lines 1-4, Item 4)

ORA takes issue with the capital forecast for the Instrumentation Improvements. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2014 project. For this reason, ORA removed $212,000 (2013 dollars) from SDG&E's request for 2014, 2015 and TY 2016."

[23] Ex. ORA-8, p. 22, line 21.

2. SDG&E Response

Considering that there were no expenditures for this project in 2014, SDG&E accepts removing the budgeted money for 2014. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

LL. Disputed Capital Cost: Electrical Improvements CPEP 2014 (Ex. SDG&E-11, p. CSL-43, lines **22-31)**

1. ORA (Ex. ORA-8, p. 23, lines 5-8, Item 5)

ORA takes issue with the capital forecast for the Electrical Improvements. ORA states, "SDG&E did not provide a Work Order Authorization or accounting records for this 2014 project. For this reason, ORA removed $212,000 (2013 dollars) from SDG&E's request for 2014, 2015 and TY 2016."

2. SDG&E Response

Considering that there were no expenditures for this project in 2014, SDG&E accepts removing the budgeted money for 2014. However, SDG&E requests the Commission keep this project funding available for 2015 and TY 2016. Please see the SDG&E Response to IV.C.2. above for the explanation and justification.

V. CONCLUSION

To summarize, SDG&E has addressed the recommendations made by ORA for O&M and capital forecasts, and shown for each disputed capital project why that project is necessary and included in the GRC forecast. SDG&E has also demonstrated that the forecasting for O&M and Capital is reasonable and should be adopted by the Commission, except where actual capital expenditures were noted as less than forecasted.

This concludes my prepared rebuttal testimony.

APPENDIX A

ORA Data Request ORA-SDG&E-086-MRL-Rev01, question #4

ORA DATA REQUEST
ORA-SDG&E-086-MRL-Rev01
SDG&E 2016 GRC – A.14-11-003
SDG&E RESPONSE
DATE RECEIVED: MARCH 9, 2015
DATE RESPONDED: MARCH 24, 2015

Data Request No: ORA-SDG&E-086-MRL-Rev01

Exhibit Reference: Ex. SDG&E-11 Electric Generation

Subject: Actual Capital Budget Documentation 2012 to Date

Please provide the following:

4. Update/Status report for each capital project in SDG&E's GRC showing.

SDG&E Response 04:

The projects represented in the GRC are developed as a snapshot-in-time, and representative of the types of projects and programs the utility expects to encounter in the normal course of business. Projects that are either delayed or advanced in one area may be offset by other projects that are advanced or delayed in another as a result of changing conditions such as permit applications, resource supply, changed priorities and emergent work. The Rate Case Plan does not provide for the utility to update its forecasted expenses, either up or down, in its application except for certain, specific and identified items in the update filing following hearings. With these conditions in mind, SDG&E responds to this question as follows:

Update for each capital project in SDG&E's GRC showing:

2014 Requested Projects	**Status**
MEF Mechanical Improvements	On-going
MEF Instrumentation Improvements	On-going
MEF Turbine Controls Upgrade	Completed
MEF Electrical Improvements	On-going
PEC Steam Turbine Upgraded N2 Packing	Complete
PEC Steam Turbine Condenser Water Box Coating	Rescheduled to 2016
PEC Revenue Meter Upgrade	Complete
PEC HP Bypass Quick Change Trip Upgrade	Complete
PEC LP Drum Level Control Valves LVDT's	Complete
PEC Emerson Ovation HMI and Controller Upgrade	Complete
PEC HRH Desuperheater Upgrade	Complete
PEC Hot Reheat Drain Pot Drains to Condenser Upgrade	Rescheduled to 2015
PEC Combustion Turbine Inlet Air Filter Upgrade	Complete
PEC Remote Racking Devices	Complete
PEC Relocated Sample Panels to New Water Lab	Complete
PEC Mechanical Improvements	On-going
PEC Instrumentation Improvements	On-going

PEC Electrical Improvements	On-going
PEC Exhaust Frame Flex Seal Upgrade	Rescheduled to 2018
PEC Remote Emissions Monitoring Upgrade	Complete
PEC Site Security Improvements	Rescheduled to 2016

Response to Question 4 (Continued)

DSEC Spare 250MVA GSU Transformer	In progress
DSEC Steam Turbine L-0R Blades	Complete
DSEC Upgrade Vibration Monitoring System	Complete
DSEC Ammonia Dilution Blower Upgrade	Complete
DSEC HP Start-up Vent Valves Upgrade	Complete
DSEC SCE Interconnection Upgrades	On-going
DSEC CT#2 Inlet Filter Media Upgrade	Complete
DSEC HRSG Penetration Seal Upgrade	Rescheduled to 2015
DSEC Desuperheater Upgrade	Complete
DSEC CT1 Air Inlet Personnel Access Improvements	Rescheduled to 2016
DSEC Mechanical Improvements	On-going
DSEC Instrumentation Improvements	On-going
DSEC Electrical Improvements	On-going
DSEC Valve Motor Operator Upgrade	On-going
CPEP Black Start Generator	In progress
CPEP Mechanical Improvements	On-going
CPEP Instrumentation Improvements	On-going
CPEP Electrical Improvements	On-going

2015 Requested Projects	**Status**
MEF Alternate Power Supply to ATS Project	Rescheduled to 2016
MEF Mechanical Improvements	On-going
MEF Instrumentation Improvements	On-going
MEF Electrical Improvements	On-going
PEC GSU Bushing Seismic Upgrade	In progress
PEC Desuperheater Isolation Valves and Controls	In progress
PEC Mechanical Improvements	On-going
PEC Instrumentation Improvements	On-going
PEC Electrical Improvements	On-going
PEC Chiller Triple Duty Valve Replacement	Rescheduled to 2018
PEC Inlet Guide Vane & Gas Control Valve Upgrade	Rescheduled to 2018
PEC Upgrade Programmable Logic Controllers	Scheduled for 2015
PEC Upgrade Chiller MKVIe to Ovation	Scheduled for 2015
DSEC Mechanical Improvements	On-going
DSEC Instrumentation Improvements	On-going

DSEC Electrical Improvements	On-going

Response to Question 4 (Continued)

DSEC Valve Motor Operator Upgrade	On-going
DSEC SCE Interconnection Upgrades	On-going
DSEC IP & LP Start-Up Vent Valve Upgrade	Rescheduled to 2016
CPEP Mechanical Improvements	On-going
CPEP Instrumentation Improvements	On-going
CPEP Electrical Improvements	On-going
CPEP New Fuel Flow Metering	Rescheduled to 2016
CPEP Micronet Control System Upgrade to Ovation	Scheduled for 2015

See attached file “2015 WOA Forms” for new 2015 approved Work Order Authorization forms, and file “ORA-SDG&E-086-MRL-REV01 Q4” for actual spend for 2015.